

Message

---

**From:** Ohl, Matthew [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=5BDE479F1AB54A9EBC9541A7D452C3B7-MOHL]  
**Sent:** 9/27/2021 3:38:04 PM  
**To:** Julie Konzuk [JKonzuk@Geosyntec.com]  
**CC:** Douglas Petroff [dpetroff@idem.in.gov]; Krueger, Thomas [krueger.thomas@epa.gov]; Andrew A Gremos [agremos@ramboll.com]; Gary Wealthall [GWealthall@Geosyntec.com]; Peter Racher [pracher@psrb.com]; Esq. Norm Bernstein [nwbernstein@nwblc.com]; Knox, Corey S CIV (USA) [Corey.S.Knox@usace.army.mil]; Becker, David J CIV USARMY CEHNC (USA) [Dave.J.Becker@usace.army.mil]; Hauber, Erin M CIV USARMY CEHNC (USA) [Erin.M.Hauber@usace.army.mil]; Clabaugh, William B CIV USARMY CELRL (USA) [William.B.Clabaugh@usace.army.mil]  
**Subject:** Comments and Authorization to Proceed: Envirochem Biorecirculation Investigation Work Plan  
**Attachments:** ECC Site Bio-Recirculation Investigation Work Plan FINAL September 3 2021.pdf

Julie,

The United States Environmental Protection Agency and the Indiana Department of Environmental Management have reviewed the Biorecirculation Investigation Work Plan and provide authorization to proceed with the investigation upon incorporation of the following comments.

1. A conservative tracer should be introduced when conducting the injection tests. The arrival of the tracer, presumably after startup of the system, would provide verification of flow paths and rough travel times.
2. The sampling method for the microbial analysis needs to specify how it will be obtained under anaerobic conditions.
3. The Quality Assurance Project Plan should be reviewed and updated as necessary.
4. Section 1.1, first paragraph, first sentence. Given one of the purposes of the work plan is to characterize potential deeper sources of contamination, include sampling at former sump locations.
5. Section 1.1, second paragraph, first sentence. Add "for further development" after the word "selected".
6. Section 3.2, first paragraph, second sentence. Remove duplicate phrase "of a minimum".

Thank you,

Matt

Matthew J. Ohl  
Remedial Project Manager  
United States Environmental Protection Agency  
77 West Jackson Boulevard, SR-6J  
Chicago, IL 60604-3590

phone: 312.886.4442  
fax: 312.692.2447  
e-mail: [ohl.matthew@epa.gov](mailto:ohl.matthew@epa.gov)

---

**From:** Julie Konzuk <[JKonzuk@Geosyntec.com](mailto:JKonzuk@Geosyntec.com)>  
**Sent:** Friday, September 3, 2021 2:47 PM

**To:** Ohl, Matthew <[ohl.matthew@epa.gov](mailto:ohl.matthew@epa.gov)>; Andrew A Gremos <[agremos@ramboll.com](mailto:agremos@ramboll.com)>

**Cc:** Krueger, Thomas <[krueger.thomas@epa.gov](mailto:krueger.thomas@epa.gov)>; Knox, Corey S CIV (USA) <[Corey.S.Knox@usace.army.mil](mailto:Corey.S.Knox@usace.army.mil)>; Clabaugh, William B CIV USARMY CELRL (USA) <[William.B.Clabaugh@usace.army.mil](mailto:William.B.Clabaugh@usace.army.mil)>; DPetroff <[DPetroff@idem.IN.gov](mailto:DPetroff@idem.IN.gov)>; Norm Bernstein <[nwbernstein@nwbllc.com](mailto:nwbernstein@nwbllc.com)>; pracher@psrb.com; Gary Wealthall <[GWealthall@Geosyntec.com](mailto:GWealthall@Geosyntec.com)>; Becker, David J CIV USARMY CEHNC (USA) <[Dave.J.Becker@usace.army.mil](mailto:Dave.J.Becker@usace.army.mil)>

**Subject:** Envirochem: ECC Biorecirculation system pre-design investigation work plan

Matt,

Please find attached a work plan that outlines a proposed pre-design investigation program for the biorecirculation program proposed to be implemented at the ECC Site. This program has been developed to address some of the uncertainties identified by EPA in response to the RAA report and also to collect pre-design investigation necessary for design of the full-scale biorecirculation system. Please let me know if you have any issues with the file.

Have a great weekend.

Regards,

Julie

**Julie Konzuk, Ph.D., P.Eng. (ON)**  
Senior Principal  
Geosyntec Consultants International, Inc.  
1243 Islington Avenue  
Suite 1201  
Toronto, ON M8X 1Y9  
Phone: 416.637.8746 Mobile: 416.271.2373

[GEOSYNTEC](#) | [SIREM](#) | [SAVRON](#)

Follow Us – [LinkedIn](#) | [Twitter](#) | [Facebook](#) | [YouTube](#)